

# CONTENTS VOLUME 70

Vol. 70 No. 1 1998

JEAN-MARC PETIT / Symplectic Integrators: Rotations and Round-off Errors	1-21
XINHAO LIAO, DONALD G. SAARI and ZHIHONG XIA / Instability and Diffusion in the Elliptic Restricted Three-Body Problem	23-39
KRZYSZTOF GOŹDZIEWSKI and ANDRZEJ J. MACIEJEWSKI / Non-linear Stability of the Lagrangian Libration Points in the Chermnykh Problem	41-58
GIANCARLO LUCARELLI, RAFFAELE PICONE and SALVATORE TROISI / The Loci of Satellite Positions: A Constellation Design Approach	59-73

## Vol. 70 No. 2 1998

D. J. SCHEERES / The Restricted Hill Four-Body Problem with Applications to the Earth-Moon-Sun System	75-98
K. G. HADJIFOTINOU and M. GOUSIDOU-KOUTITA / Comparison of Numerical Methods for the Integration of Natural Satellite Systems	99-113
TOSHIO FUKUSHIMA / A Fast Procedure Solving Gauss' Form of Kepler's Equation	115-130
RICHARD A. SERAFIN / Bounds on the Solution to Kepler's Equation: II. Universal and Optimal Starting Points	131-146

## Vol. 70 No. 3 1998

MARTA FOLGUEIRA, JEAN SOUCHAY and HIROSHI KINOSHITA / Effects on the Nutation of $C_{4,m}$ and $S_{4,m}$ Harmonics	147-157
KENNETH R. MEYER / The Evolution of the Stable and Unstable Manifold of an Equilibrium Point	159-165
KIYOTAKA TANIKAWA and HIROAKI UMEHARA / Oscillatory Orbits in the Planar Three-Body Problem with Equal Masses	167-180
G. TANCREDI / Chaotic Dynamics of Planet-Encountering Bodies	181-200
M. A. SHARAF, ABDEL-NABY S. SAAD and AMR A. SHARAF / Unified Symbolic Algorithm of Gauss Method for Near-Parabolic Orbits	201-214



F. ROOSBEEK and V. DEHANT / RDAN97: An Analytical Development of Rigid Earth Nutation Series Using the Torque Approach	215-253
M. A. JALALI and Y. SOBOUTI / Some Analytical Results in Dynamics of Spheroidal Galaxies	255-270
F. VARADI / Perturbation Theory of Tori Without Complete Fourier Expansion	271-278
The Kluwer L <sup>A</sup> T <sub>E</sub> X Style File	279-280
Volume Contents	281-282

